Application/Control Number: 10/089,426

Art Unit: 2800

CLMPTO

03/29/02

EG

- 1. (Amended) System for providing wireless point-to-multipoint connections having an access point using full-duplex mode and terminals using half-duplex mode, characterized in that
- each of a plurality of the terminals has an equipment identifier,
- each of said plurality of the terminals is arranged to classify itself as belonging to a first group of terminals or a second group of terminals based on said equipment identifier according to a predefined rule; and
- the access point is arranged to send a first broadcast message to said first group of terminals and a second broadcast message to said second group of terminals using same downlink carrier, and
- the access point is arranged to schedule the transmission period of at least one terminal of said second group to overlap at least partly with the transmission period of said first broadcast message.

2. A system according to claim 1, characterized in that

- the access point is arranged to schedule the transmission period of at least one terminal of said first group to overlap at least partly with the transmission period of said second broadcast message.

Application/Control Number: 10/089,426

Art Unit: 2800

3.(Amended) Access point of a point-to-multipoint wireless link system, characterized in that

- the access point is arranged to send a first broadcast message in a frame to a first group of terminals and a second broadcast message in said frame to a second group of terminals using same downlink carrier, and
- the access point is arranged to schedule the transmission period of at least one terminal of said second group to overlap at least partly with the transmission period of said first broadcast message.
- 4. (Amended) Terminal of a point-to-multipoint wireless link system, which terminal has an equipment identifier, characterized in that

the terminal is arranged to classify itself as belonging to a first group of terminals or a second group of terminals based on the equipment identifier according to a predefined rule, and the terminal is arranged to receive a first broadcast message if it belongs to said first group and a second broadcast message if it belongs to said second group, wherein said first broadcast message and said second broadcast message are sent using same downlink carrier.

5. The terminal according to claim 4, characterized in that the terminal is arranged to perform the classification based on the value of the least significant bit of the identifier.

Application/Control Number: 10/089,426

Art Unit: 2800

- 6. (Amended) Method for providing wireless point-tomultipoint connections between an access point and a plurality of terminals, characterized in that
- the terminals are grouped into a first group and a second group.
- during a transmission frame, the access point sends a first broadcast message to terminals in the first group and a second broadcast message to terminals in the second group wherein said first broadcast message and said second broadcast message are sent using same downlink carrier, and
- at least one of the terminals of the second group is scheduled to transmit during at least a part of the transmission period of said first broadcast message.
- 7. The method of claim 6, characterized in that at least one of the terminals of the first group is scheduled to transmit during at least a part of the transmission period of said second broadcast message.